

1SS294

SILICON EPITAXIAL PLANAR SCHOTTKY BARRIER DIODE

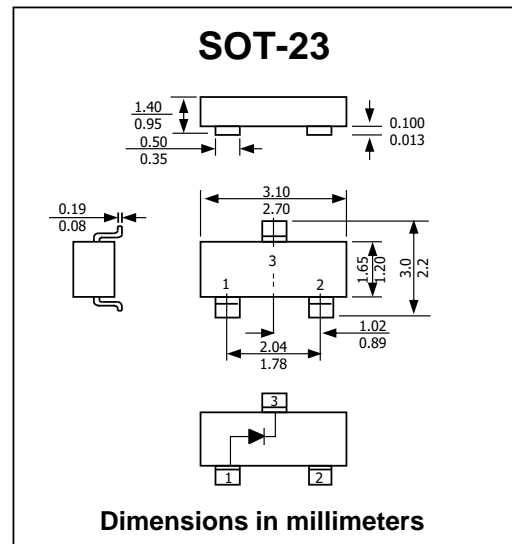
PRV : 45 Volts
Io : 100 mA

FEATURES :

- * Small surface mounting type
- * Low forward voltage
- * Low reverse current
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : SOT-23 plastic Case
- * Marking Code : " XM "



MAXIMUM RATINGS AND THERMAL CHARACTERISTICS (Ta = 25 °C)

Parameter	Symbol	Value	Unit
Maximum Peak Reverse Voltage	V_{RM}	45	V
Reverse Voltage	V_R	40	V
Maximum Peak Forward Current	I_{FM}	300	mA
Average Forward Current	$I_{F(AV)}$	100	mA
Power Dissipation	P_D	150	mW
Junction Temperature	T_J	125	°C
Storage Temperature Range	T_{STG}	-55 to +125	°C

Parameter	Symbol	Value	Unit
Typical Thermal Resistance Junction to Ambient ¹⁾	$R_{\theta JA}$	666	°C/W

¹⁾ Device mounted on FR-4 substrate PC board, with minimum recommended pad layout.

ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Parameter	Test Condition	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage	$I_R = 100 \mu A$	$V_{(RB)R}$	40	-	V
Forward Voltage	$I_F = 100 mA$	V_F	-	0.6	V
Reverse Current	$V_R = 40 V$	I_R	-	5	μA
Total Capacitance	$V_R = 0 V, f = 1 MHz$	C_T	-	25	pF

RATINGS AND CHARACTERISTIC CURVES (1SS294)

